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82. (new) A process for producing jasmine lactone, which comprises the steps of:

- (i) causing cells or a culture of a microorganism having an activity to convert α -linolenic acid to 13-hydroxy-9,15-octadecadienoic acid and belonging to the genus *Pediococcus* or *Bifidobacterium*, or a treated matter thereof, to act on α -linolenic acid or a composition containing α -linolenic acid to form 13-hydroxy-9,15-octadecadienoic acid; and
- (ii) causing cells or a culture of a microorganism having an activity to beta oxidize 13-hydroxy-9,15-octadecadienoic acid and belonging to the genus *Kluyveromyces*, *Zygosaccharomyces*, *Pichia*, *Saccharomyces*, or a treated matter thereof, to act on the formed 13-hydroxy-9, 15-octadecadienoic acid to form jasmine lactone; and
- (iii) recovering the formed jasmine lactone.

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83. (new) The process according to claim 82, wherein the microorganism in step

- (i) is *Pediococcus pentosaceus* or *Bifidobacterium bifidum*.

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84. (new) The process according to claim 82, wherein the microorganism in step

- (i) is *Pediococcus pentosaceus* IFO3891 or *Bifidobacterium bifidum* JCM7002.

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85. (new) The process according to claim 82, wherein the microorganism in step

- (ii) is *Kluyveromyces marxianus*, *Kluyveromyces thermotolerans*, *Kluyveromyces wickerhamii*, *Zygosaccharomyces rouxii*, *Zygosaccharomyces bailli*, *Zygosaccharomyces cidri*, *Pichia jadinii* or *Saccharomyces cerevisiae*.

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